State of California — The Resources Agency

Memorandum

Date : November 1, 1996

To : Lester Snow, Executive Director
CALFED Bay-Delta Program

From : Ed Craddock, Chief
Water Conservation Office
Division of Local Assistance
Department of Water Resources

Subject: Water-Use Efficiency

As an invited participant in the Bay-Delta Advisory Council Water-Use Efficiency Work Group, I offer the following comments on the proposed approaches for urban and agriculture. My perspective is based on involvement in resource conservation over the past three decades, and management of successful urban and agricultural water use and conservation programs since the 1976-77 drought.

In general, there is a tone to WUEWG that suggests that not much has happened in conservation, and heroic efforts are needed to make CALFED's base-level water-use efficiency program credible. In addition, there is also a position taken by many that urban water conservation is advancing, while agricultural water conservation is not. The following comments are offered to put both of these positions in the proper perspective:

1. Since the 1970s, there has been a marked reduction in certain categories of agricultural and urban water use.

2. Better irrigation management increased average on-farm irrigation efficiencies from 60 to 70 percent on the average during the 1980s. In many areas, this led to district and regional efficiencies ranging from 80 to over 90 percent.

3. Indoor residential use increased only 23 percent between the early 1970s and 1990 while population grew 47 percent. Between 1980 and 1990, industrial water use declined by almost one-half to only 8 percent of total urban use.

4. Applied water use in agriculture declined almost 4 million acre-feet in the 1980s due to federal programs, urbanization of agricultural lands, crop shifts, and irrigation efficiency improvements.

The demand reductions cited above were the result of market forces, plumbing code changes, aggressive conservation programs, and water quality regulations. CALFED can advance water-use efficiency best by building on and strengthening existing programs and relying on market forces.

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Rick Soehren, of your staff has done an excellent job of laying out a wide range of objectives and tools to reach those objectives. A small and more focused list of objectives and tools, building solely on existing programs, could be advanced by CALFED in order to be most effective. The following suggestions are offered for your consideration:

1. Urban Best Management Practices need to be implemented more vigorously and uniformly as is recommended by CALFED staff. The California Urban Water Conservation Council should remain a voluntary activity focusing on the implementation of appropriate BMPs and the coordination of that effort.

2. Better urban water management planning is needed. Existing programs to assist in the development and technical review of urban water management plans should be adequately funded. CUWCC should be funded to assume the responsibility for endorsing those plans that adequately plan for implementation of BMPs.

3. In parallel with the suggested urban approach, Agricultural Efficient Water Management Practices must be implemented through an Agricultural Water Management Council as is recommended by CALFED staff. The Council should remain a voluntary activity focusing on the implementation of appropriate EWMPs and coordination of that effort.

4. The signing of an agricultural MOU establishes procedures for adequate agricultural water management plans. Existing programs need to be strengthened for technical review of those plans and the Council funded to assume the responsibility for endorsing those plans that adequately plan for implementation of EWMPs.

5. Good planning relies on adequate data. The data to analyze landscape water use and evaluate landscape program effectiveness need to be strengthened before BMPs can be evaluated and implemented effectively. The data should be of similar quality to the crop evapotranspiration data used to evaluate agricultural water needs. Existing programs need to be adequately funded to carry out this task.

6. Financial incentives will be necessary to ensure the development of adequate plans and implementation of practices as CALFED staff has noted. However, the incentives would have to be funded at a much greater level than the one-half of 1 percent that may be used for water-use efficiency practices in Proposition 204.

7. Only "semiregulatory" requirements would be necessary. They could include requirements such as no water agency can receive assistance unless holding an endorsed plan. In addition, no water could be transferred unless both the transferor and the transferee held endorsed plans.

My experience leads me to the conclusion that a relatively straightforward, voluntary, cooperative, and cost-effective approach would suffice to continue to advance water-use efficiency in California as has been accomplished in the past. The many water-use efficiency efforts that exist in the private sector and at the State, federal, and local levels need the support of stronger incentive programs. Supporting the voluntary councils of local agencies, environmental organizations, and others should be the cornerstone of the CALFED water-use efficiency effort.

If you have any questions, please call me at 327-1655.

cc: Rick Soehren ✓

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